

INFORMATION TECHNOLOGY PLAN

FOR FISCAL YEARS 2016 - 2018



June 2016

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1 CITY PROFILE

The City of Pleasant Hill, incorporated in 1961, is located in the East Bay of the San Francisco Bay Area in Contra Costa County, California. The City covers 8.1 square miles where an estimated 34,497 people reside.

Approximately 113 employees serve the community within the following departments/divisions:

- Building
- City Attorney
- City Clerk
- City Council
- City Manager
- City Treasurer
- Economic Development
- Engineering
- Finance
- Human Resources
- Information Technology
- Maintenance
- Planning/Code Enforcement
- Police

The City of Pleasant Hill operates on a two-year (biennial) budget. On June 6th of 2016, the City Council adopted the biennial budget for Fiscal Years 2016 – 2018.

2 TECHNOLOGY PROFILE

The Information Technology (IT) Division is responsible for the hardware, software, and technology infrastructure that supports the City's operations at its three sites, City Hall, the Police Department, and the Public Services Center. Specifically, these technologies include data information systems, network infrastructure, cybersecurity, telephone and other communication systems (e.g., cell phones, radios, etc.), audio/visual equipment, personal electronic devices, printing and duplication, workflow and document management, physical access control systems, and video surveillance.

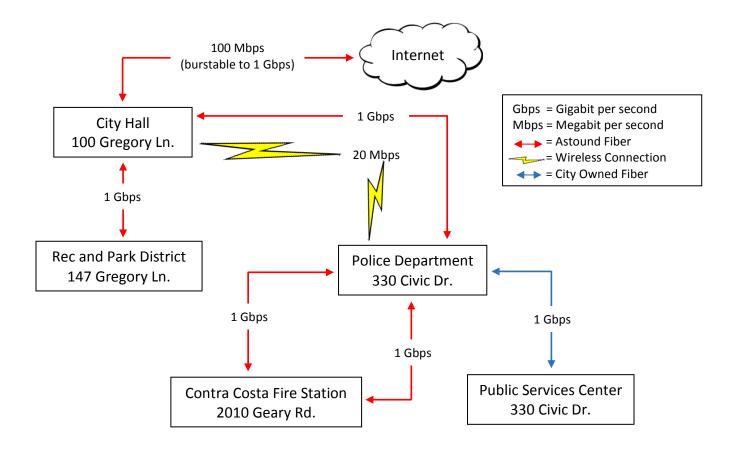
2.1 Staff

The IT Division is comprised of two full time positions, a Chief Technology Officer (CTO) and an Information Systems Coordinator (support technician). The Chief Technology Officer reports to the Assistant City Manager and the City Manager. Historically, the City has employed a CTO and two full-time support technicians, one that was dedicated to the Police Department and the other to City Hall.

Beyond supporting the City staff's workstations and applications, the IT Division is also responsible for maintaining and administering the network and servers used by the City. Currently, the City of Pleasant Hill has contracted with Ontai Solutions, LLC to assist the IT Division to fulfill this role on an as needed basis.

2.2 Network Infrastructure

City operations are based at three separate sites throughout Pleasant Hill (City Hall, Police Department, and Public Services Center). Fiber connections provided by Astound Broadband, LLC link all three sites to create a Wide Area Network. The diagram below illustrates the fiber and wireless connections along with the respective speeds of each connection.



City Hall is the central hub from which all other locations access the 100 Mbps (megabit per second) connection to the Internet. However, data between sites are transferred at a much faster rate of 1 Gbps (gigabit per second). Redundancy is built into critical points in the network to prevent or reduce downtime. For instance, there is a primary and backup fiber connection directly from the Police department to Contra Costa Fire to preserve access to the East Bay Regional Communications System (EBRCS) in the event that the primary connection is disrupted. In addition, a backup wireless connection from City Hall to the Police Department further increases the reliability of the network should there be an interruption to the 1 Gbps Astound fiber.

2.3 Hardware

The City of Pleasant Hill houses two main server rooms, one at City Hall and the other at the Police Department. Virtual technology (VMWare) is used to run the majority of the servers for the City. The server room at City Hall houses two physical servers that host 39 virtual servers that provide the majority of the functions for the entire City. Five of the 39 virtual servers are dedicated for the Recreation and Park District, which the City has agreed to house but does not support or maintain. The Recreation and Park District compensates the City \$2,000 per month for hosting their servers. Three additional physical servers at City Hall function as the backup server, the traffic light controller, and the video surveillance recorder. Beyond City Hall, three

physical servers reside within the datacenter at the Police Department to support video surveillance, Computer Aided Dispatch (CAD), and the call center recording system. The breakdown of the various server operating systems currently under use is as follows:

Operating System	Number of Servers
Windows Server 2003	9
Windows Server 2008	12
Windows Server 2012	14
Other	4
Totals	39

There are approximately 100 end-user workstations across all City staffed sites. The table below lists the locations and types of operating systems currently used by the City.

Workstations	City Hall / Corp Yard	Police Dept.	Total
Windows 7	54	37	91
Windows Vista	6	3	9
Totals	60	40	100

2.4 Software

The City of Pleasant Hill has standardized Microsoft (MS) Office as the default office suite for word processing, spreadsheets, presentations, and email. In the last two years, the majority of the staff were upgraded to MS Office 2013.

All emails are processed through MS Exchange 2010 and accessed by staff using MS Outlook. Spam filtering is provided by AppRiver, an online vendor that removes 99% of spam, malware, and viruses before passing the legitimate emails onto the City's Exchange Mail Server for distribution to staff.

Content filtering of the internet is performed by Websense. All websites identified as possibly containing viruses, phishing, inappropriate content, or malicious intent are blocked. Symantec Corporate Edition is deployed in conjunction with MS Security Essentials to further provide antivirus and malware detection on all workstations.

The following are some of the other major applications used by City Hall:

Application	Description
Accela Automation	Building Permits, Inspection, and Code Enforcement
Citrix Systems	Remote Access Software
Civic Plus	Website Design and Hosting
Granicus	Agenda and Meeting Automation
Metroscan Online	Real Estate Database
MOMS	Financial Software
Laserfiche Avanti	Document Archiving and Management
PublicStuff	City's Mobile Service App
Shoretel System	Voice over Internet Protocol Phone System
Cisco WiFi System	City Hall Wireless Network

The following are some of the critical applications used by the Police Department:

Application	Description
Vigilant Solutions	Automated License Plate Recognition System
Automated Regional Information Exchange System (ARIES)	Contra Costa Online Criminal Justice Information System
Automated Vehicle Location (AVL)	GPS Mapping of Police Vehicles
CABS	Computer Aided Booking System
Cal-Photo	DMV Database of Images
Case Cracker	Interrogation Recording
Cogent	Booking System
Coplogic	Online Citizen Reporting

Application	Description
Crywolf	False Alarm Management Solution to Reduce, Track, and Charge for False Alarms
Data911	Computer-Aided Dispatch, Report Writer, Record Management System
East Bay Regional Communications System (EBRCS)	911 Radio System
File On Q	Evidence Logging
NICE Engage Platform	Call Center Recording System
Emergency CallWorks	911 Phone System
Nixle	Community Alert System

3 PRINCIPLES AND MISSION

3.1 Principles

The use of technology by city government has increased dramatically over the past 20 years, from simply supporting desktop computers and network servers to being a tool for productivity, reaching virtually every operation. As demand for technology applications has increased, the need to develop integrated plans has become critical for success. Proper implementation of technology can result in cost reductions, increased staff efficiency, and improved transparency. The Information Technology Division works as a catalyst within each branch of City government to enhance such results across all divisions.

The Information Technology Division operates on three guiding principles. These principles are the foundation upon which the Division achieves its success.

- 1) <u>Purpose Driven:</u> All technology projects and implementations should be purpose driven to improve a process, increase efficiency, and/or reduce cost. Technology should not be implemented for the sake of implementing technology. In order to adhere to this principle, major technology projects and implementations should have the support and input of stakeholders, which results in a higher rate of end-user adoption.
- 2) <u>Based on Value:</u> The solution chosen should be based on value instead of price alone. Best value is based on neither the highest nor lowest price, but a combination of price and performance that provides the greatest overall benefit in response to the specified requirements. As a prerequisite, adequate funding for all technology initiatives should be defined and encumbered before implementation.
- 3) Standardization, Integration, Consolidation, and Scalability: These are all critical considerations of any technology initiative. Standardization is the process of defining, procuring, and implementing consistent technologies whether by brand or type in order to achieve lower cost of procurement, minimize complexity of support, and maximize compatibility and interoperability. Integration is the ability for two or more separate systems or solutions to interoperate and communicate together. Consolidation is minimizing the use or maintenance of similar solutions or devices that perform the same function. Scalability is the ability for the solution or system to grow or consolidate along with the needs of the organization with minimal additional investment.

3.2 Mission

Whereas the principles are the guidelines under which the Information Technology Division operates, the mission defines the daily operation of the Division and directs which projects are undertaken. All of the projects proposed in the Information Technology Plan are founded on the mission that the Technology Division strives to achieve.

The mission of the Information Technology Division can be categorized into five main areas. They are:

- 1) <u>High Level of Support:</u> Maintain a high level of support to all City staff by reducing response times and increasing effectiveness in resolving issues. Providing quality support to City staff is the core function of the Information Technology Division.
- 2) <u>Efficiency in Operation:</u> Implement solutions to increase efficiencies in processes, systems, and operations. Projects could include methods of implementing technology to automate tasks and save staff time. Efficiencies could also take the form of equipment and software consolidation wherever applicable.
- 3) <u>Growth in Function:</u> Implement innovative solutions to provide new features and functions to expand the value of City services for its residents.
- 4) Reliability in the System: Technology can only be effective when it's reliable. The Information Technology Division is responsible for maintaining the functionality of the workstations, network infrastructure, and servers. In order to achieve greater reliability, redundancy must be built into the critical failure points throughout the system. This would include backup solutions for power, data, and equipment.
- 5) <u>Cost Reductions:</u> Reducing cost in operations and ongoing maintenance is always a top priority. Cost saving measures could include more aggressive negotiations to lower recurring support and service contracts and replacing high priced solutions with more value driven ones that are better suited for the City. Elimination of underutilized or obsolete systems can also result in significant cost savings. The Information Technology Division will be creative and assertive in finding reductions wherever possible. Opportunities to reduce costs must be weighed in consideration of the Division's other principles and objectives.

4 STATUS OF 2014 -2016 TECHNOLOGY PLAN PROJECTS

The primary function and responsibility of the IT Division is to provide professional, timely, and effective technical support to the staff of the City. For the past two years, the IT Division has not only kept that standard, it has also maintained a 99.9% network and server reliability.

In addition to providing support services and maintaining the network, the IT Division also has made great technological strides within every department and division across the City. In March of 2015, the Chief Technology Officer presented a two year technology plan to City Council which coincided with the City's biennial budget for Fiscal Years 2014 – 2016.

The contents of the plan included an ambitious list of 34 technology-related improvement projects to be completed within the two year time period. The goal of the 34 proposed projects was to target "the low hanging fruit." In other words, focus on the systems, applications, equipment, or infrastructure that was the easiest to update or improve in a relatively short amount of time and could be achieved with a modest amount of financial investment. Any technology that was obsolete or faced imminent failure was also replaced. As a result, the IT Division was able to make a significant impact on the state of the City's technology completing 29 improvement projects. Of the 29, 23 were part of the originally proposed 34 in the 2014 – 2016 technology plan, and six were impromptu projects added as a result of special circumstances that were unforeseen and required immediate action. Due to the impromptu projects, some of the proposed projects for FY 2014 – 2016 were deferred to 2016 – 2018.

The following tables illustrate the status of all projects undertaken and the departments/divisions that benefited from them.

Completed 2014 – 2016 Technology Plan Projects			
Project Name	Description	Divisions Benefited	
New Spam Filter Solution	Research and implement a more effective spam filtering solution	All	
New VoIP System	Research, evaluate, and implement a new Voice-over- Internet Protocol (VoIP) phone system to reduce Private Branch Exchange (PBX) maintenance costs and increase functionality and flexibility	All	
Assess the Emergency Operations Center (EOC)	Assess the technology needs of the Emergency Operations Center and determine requirements to bring into current standards	All	

Completed 2014 – 2016 Technology Plan Projects			
Project Name	Description	Divisions Benefited	
New Email and Website Domain	Implement a new email address that is easier to convey and remember	All	
Citizen Engagement Mobile App	Evaluate potential mobile apps to increase citizen engagement and access to information	All	
Replace Outdated Workstations	Replace obsolete and outdated workstations at both City Hall and the Police Department	All	
Record Archive Solution	Scan to convert all historical hardcopy records to softcopy while adhering to legal record retention policies and regulations	All	
Server, Active Directory, and Exchange Analysis	Evaluate the current configuration of the servers, Active Directory, and Exchange servers to ensure adherence to best practices	All	
Community Room A/V	Update the audio and video equipment in the large community room to add a larger display and implement a more intuitive design	All	
Biennial Technology Plan	Create a biennial Information Technology Plan that outlines specific projects and forecasts expenditures	All	
Access Control System	Install updated access control system at City Hall that encompasses video surveillance and security system	City Hall	
City Hall Wireless System	Install an enterprise wireless network solution at City Hall for staff and public use	City Hall	
Carpet Replacement Project	Provide technology support to Engineering Div. to replace the carpeting on the ground floor of City Hall	City Hall	
Review Granicus, iLegislate, and CivicPlus Integration Capabilities	Evaluate the capabilities and features of Granicus focusing on integration possibilities with CivicPlus to increase staff efficiency and improve public usability	City Manager, City Clerk, Planning	
Technology Staff Assessment	Perform cost analysis after one year of expenses spent on consultant Network Administrator comparing costs to hiring in-house	IT	
Accela Update	Revise permit system for Building, Planning, and Engineering to allow quicker response times for clients, create a workflow for Code Enforcement, convert classic reports to ad-hoc or Crystal reports and increase efficiency in the inspection process	Engineering, Planning, Building	

Completed 2014 – 2016 Technology Plan Projects			
Project Name	Description	Divisions Benefited	
MOMS Update	Install new MOMS Financial Software update and upgrade the server operating system from Win Server 2000 to 2012	Finance	
4G Wireless Modems in Mobile Data Terminals	Install upgraded modems using 4G technology in the mobile data terminals of police vehicles	Police Dept.	
Police Application Integration Evaluation	Review all applications used by the Police Department and improve integration between applications	Police Dept.	
Police Body Cameras Pilot	Implement a pilot body camera program with several officers who volunteered for the pilot	Police Dept.	
New Mobile Data Terminals	Replace obsolete and outdated Mobile Data Terminals in all police vehicles	Police Dept.	
Renew Dispatch Workstations	Replace obsolete computers and applications within the police dispatch center with new workstations and updated software	Police Dept.	
New Public Safety Answering Point (911 Call Handling) System	Replace or renew obsolete equipment supporting the 911 calling system	Police Dept.	

2014 – 2016 Completed Impromptu Projects			
Project Name	Description	Divisions Benefited	
City Hall Video Surveillance System	Replace outdated City Hall video surveillance system	All	
45 Day Email Retention Policy	Provide staff training on email management and retention policy	All	
Remote Entry to Police Gate	Provide a means to remotely open the parking lot gates and sally port doors at PHPD	Police Dept.	
Renovate Briefing Room	Revitalize the Briefing Room at PHPD with new 65" touchscreen display, Blu-ray player, laptop computer, and wireless projection system	Police Dept.	
Modernize the Emergency Operations Center (EOC)	Install new 84" mobile touchscreen display, Blu-ray player, projector, audio speakers, and control system	Police Dept.	

2014 – 2016 Completed Impromptu Projects		
Project Name	Description	Divisions Benefited
Automatic License Plate Readers (ALPR)	Replace existing obsolete ALPR system with the new Vigilant Detection System	Police Dept.

2014 – 2016 Projects Deferred to 2016 – 2018 Technology Plan

Project Name	Description	Divisions Benefited
IT Support Tracking System	Implement an issue tracking system for staff to submit trouble tickets and track progress	All
Centralized Workstation Management System	Research and implement a centralized computer management system to automate the update and maintenance of workstations	All
Update and Reconfigure Servers	Update and reconfigure servers, Active Directory, and Exchange to adhere to best practices	All
Remote Access Solution	Evaluate the need for existing thin-client workstations and Citrix	All
Network Security Evaluation	Perform a cybersecurity analysis on the vulnerabilities of the network to potential hacks, viruses, and other attacks	All
Evaluate CRM Solution	Evaluate a customer relationship management (CRM) application to help economic development track and stay in touch with local businesses	Economic Development, Planning
Organize and Discard	Organize and discard surplus, obsolete, or damaged equipment in datacenters and technology work area	IT
Disaster Recovery and Backup Solution	Develop a redundant server and network solution to prevent downtime or data loss during a system failure	All
Single Sign-on for MDTs	Install single sign-on solution in the Mobile Data Terminals (MDTs) of police vehicles	Police Dept.
Two-Factor Authentication on MDTs	Install two-factor authentication in the Mobile Data Terminals of police vehicles	Police Dept.

Beyond supporting staff and modernizing the City, the IT Division has also successfully worked to reduce operational and maintenance costs. For example, the division has renegotiated the City's internet access costs with Wave Broadband resulting in \$16,680 of savings over the next two years; replaced the City's Centrex phone system with a Voice over Internet Protocol (VoIP) system resulting in \$20,000 of savings annually; and replaced the intrusion system at City Hall resulting in \$14,736 of savings annually.

All in all, the IT Division has been able to reduce operational and maintenance costs to the City by \$250,190 over the next five years.

Expenditures for Fiscal Years 2014 - 2016 totaled approximately \$2M, which left a positive fund balance of just over \$630,000. The following tables summarizes the projected and actual budgets for Fiscal Years 2014 - 2016.

Police Department Budget for FY 2014 – 2016	Projected	Actuals
Revenue	\$1,351,433	\$1,569,432
Expenditures		
Technology Projects	\$195,747	\$445,053
Maintenance and Support	\$548,980	\$543,269
Misc. Hardware and Software	\$205,684	\$232,000
Total Expenditures	\$950,411	\$1,220,322
Ending Balance	\$401,022	\$349,110

All Other Budgets for FY 2014 – 2016	Projected	Actuals
Revenue	\$1,040,224	\$1,054,314
Expenditures		
Technology Projects	\$948,966	\$492,123
Maintenance and Support	\$270,000	\$151,593
Misc. Hardware and Software	\$191,050	\$128,946
Total Expenditures	\$1,410,016	\$772,662
Ending Balance	(\$369,792)	\$281,652

5 THE PLAN FOR 2016 - 2018 FISCAL YEARS

The Fiscal Years 2014 – 2016 Information Technology Plan focused on increasing the City's ability to deliver services while working to reduce capital and maintenance costs wherever possible. For Fiscal Years 2016 – 2018, the IT Division plans to continue integrating and further utilizing the technologies that have been implemented in 2014 – 2016. In addition, new solutions will be sought after and implemented as needed for all departments and divisions. Lastly, the internal needs of the Technology Division will be made a priority in order for the division to continue to provide the high level of support the City has come to expect.

Over the last two years, amongst the 29 completed projects, some of the highlights include a new phone system, document management system, city mobile app, 911 call handling system, wireless network, video surveillance system, access control system, and automatic license plate reader system. With so many technologies and changes implemented in such a short amount of time, additional effort needs to be taken to ensure the staff is properly trained and that the City is utilizing these investments to their full potential. This will be one of the primary priorities for the 2016 – 2018 fiscal years. One such example is the new document management system, Laserfiche, which has been installed. The next phase of the project begins with staff training and the task of properly converting or scanning all of the document archives into the new system so it can easily be researched and retrieved. The IT Division will assist the various departments in this effort.

A second priority for the IT Division during the 2016 – 2018 fiscal years is continue to improve City operations through the use of technology. The Chief Technology Officer regularly meets with department and division leaders to seek their input and technological requests. The resulting input is also factored into the Information Technology Plan. At the request of the Police Department, the IT Division will be assisting to distribute smartphones to each officer, implementing a reverse 911 system to alert staff in the event of an emergency, and employing a criminal analysis application to assist the PHPD to predict and prevent crime. For the rest of the City, other improvements include replacing the City's obsolete content filtering appliance and installing a new solution to allow staff remote access to their files.

Lastly, the IT Division will prioritize improving and updating internal division systems and equipment to ensure the City's network and servers continue to operate with 99.9% reliability. Some of the proposed projects will include replacement of the City's aging servers, performing a network security audit to safeguard from hackers and malicious viruses, and building additional redundancies to secure the integrity of the City's data. And in keeping with the effort to maintain a high level of support, a new work order system is also proposed to aid the IT Division to better track and respond to support issues.

Due to the increased volume of new technologies being implemented in the last couple of years and into the foreseeable future, the IT Division has also proposed to augment its staff to assist

in maintaining the vast array of systems and provide additional support to the City. The addition would also allow the IT Division to take more ownership of maintaining the City's technology versus relying on the current consultant, Ontai Solutions, LLC. As a result, the Chief Technology Officer anticipates being able to reduce the consultant fees by \$15,000 to \$20,000 annually. Although the IT Division currently consists of two staff members, historically the division comprised of three members. The addition of one more staff member in 2016 - 2018 would bring the total number of the IT Division back to three.

The Information Technology Division has formulated a project priority list for Fiscal Years 2016 – 2018. The projects are listed and described in the following tables. Each proposed project has been classified according to the IT Division's objectives. The departments and divisions that they benefit are also listed along with how they align with the City Council's goals.

OBJECTIVE #1: High Level of Support					
Project Name	Project Name Description		Council Goals		
Accela Training	Accela Admin training for IT Staff	All	Goal #5, Objective #1		
New Content Filter	Replace existing obsolete content filter with one that is more intuitive and offers the latest features	All	Goal #1, Objective #2		

OBJECTIVE #2: Efficiency			
Project Name	Description Divisions Benefited		Council Goals
Remote Access Solution	Virtual Desktop Infrastructure (VDI) to enable seamless remote access of staff files from any workstation or location	All	Goal #1, Objective #2
Issue Smartphones to Patrol	Purchase and issue smartphones to all patrol officers on staff at the police department	Police Dept.	Goal #1, Objective #1
Organize and Discard Old Equipment	Organize and discard surplus, obsolete, or damaged equipment in datacenters and technology work area	IT	Goal #1, Objective #2
Agenda Management Solution	Seek an agenda management solution that better suits the City's needs and can be used for meetings that do not require video or audio recording	All	Goal #5, Objective #1
Reverse 911 System	Emergency notification system to deliver messages to staff and/or a geo area via phone, text, and email	Police Dept.	Goal #1, Objective #3
Single Sign-on for MDTs	Install single sign-on solution in the Mobile Data Terminals (MDTs) of police vehicles	Police Dept.	Goal #1, Objective #2

OBJECTIVE #2: Efficiency			
Project Name	Description	Divisions Benefited	Council Goals
Evaluate MS Sharepoint	Evaluate and implement a solution to foster collaboration and information sharing including file sharing, storage, and simultaneous file edits	All	Goal #5, Objective #1
Document Scanning	Contract with a service to digitize Clerk's Office and Human Resources documents into Laserfiche	Clerk's Office, HR	Goal #5, Objective #1

OBJECTIVE #3: Growth			
Project Name	Description Division Benefite		Council Goals
Install Write Once, Read Many (WORM) Device	Laserfiche Add-On to replace paper records with electronic originals once scanned into Laserfiche	All	Goal #1, Objective #2
Implement Bair Analytics	Implement a crime analysis application to assist PHPD in charting, predicting, and preventing crime	Police Dept.	Goal #1, Objective #1
Issue Body Cameras	Further expand the body camera pilot program to include additional officers	Police Dept.	Goal #1, Objective #1
Research Geographic Information System (GIS)	Determine the most efficient and cost-effective way to revitalize GIS functionality for the City	Engineering, Planning, Public Works	Goal #3, Objective #2
Two-Factor Authentication on MDT's	Install two-factor authentication in the Mobile Data Terminals of patrol vehicles	Police Dept.	Goal #1, Objective #2
Modernizing the Emergency Operations Center (EOC)	Install additional displays and wire for data and communications	Police Dept.	Goal #1, Objective #3
Mobile Device Management Solution (MDM)	Implement a MDM solution to track, secure and remotely wipe City issued smartphones and tablets	IT	Goal #1, Objective #2

OBJECTIVE #4: Reliability			
Project Name	Description	Divisions Benefited	Council Goals
Server Replacement	Replace two aging VMWare host servers with four new servers to increase capacity and storage	All	Goal #1, Objective #2
Network Security Audit	Perform a security audit on the City's network to assess vulnerability to hacks and malware	All	Goal #1, Objective #2

OBJECTIVE #4: Reliability			
Project Name	Project Name Description		Council Goals
Build a Disaster Recovery (DR) site at PHPD	Establish a failover server infrastructure at PHPD should the datacenter at city hall ever fail	All	Goal #1, Objective #3
Install Solarwinds	Install a solution to monitor network and server health and be proactive in preventing outages	All	Goal #1, Objective #2
Cloud Backup Service	Sign up with a cloud backup solution for recovery of our data and enable us access to critical applications should our datacenter suffer catastrophic failure	All	Goal #1, Objective #2
New Computer-Aided Dispatch (CAD) System in 2021	Reserve budget for the eventual replacement of the PHPD's CAD and Report Management System (RMS) in 2021	Police Dept.	Goal #1, Objective #1

OBJECTIVE #5: Cost Reduction					
Project Name	Description	Divisions Benefited	Council Goals		
Renew Copier Lease	Current copier lease with Caltronics will expire in April of 2017	All	Goal #1, Objective #2		

OBJECTIVE: Multiple				
Project Name	Description	Objectives	Divisions Benefited	Council Goals
Update Technology Plan	Update the FY 2016 – 2018 Technology Plan for FY 2018 – 2020	All	IT	Goal #2, Objective #3
Implement IT Work Order System	Implement an IT work order system to track issue submissions and provide staff with progress updates	Support, Efficiency	All	Goal #1, Objective #2
Install Customer Relationship Management (CRM) Solution	Install a CRM solution to help economic development track and stay in touch with local businesses	Efficiency, Growth	Economic Development, Planning	Goal #2, Objective #2
Research and Implement Human Resource Information System	Work with Human Resources to implement a system to manage staff information, training, recruiting, and compliance	Efficiency, Growth	HR	Goal #1, Objective #2
Evaluate MS Exchange 365	Consider migrating the email server to the cloud to increase reliability and accessibility while decreasing maintenance requirements	Efficiency, Reliability	All	Goal #5, Objective #1

OBJECTIVE: Multiple				
Project Name	Description	Objectives	Divisions Benefited	Council Goals
Evaluate Replacement Financial System	Work with Finance Department to evaluate financial systems that may be more suitable for the City	Efficiency, Growth	Finance	Goal #1, Objective #2

6 TIMELINE FORECAST

The table below illustrates the forecasted timeline for completion of each project.

Objective #1: High Level of Support	Fisc	al Year	2016 - 2	017	Fisc	al Year	2017 - 2	018
Project Name	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
Accela Training								
New Content Filter								
Objective #2: Efficiency	Fisc	al Year	2016 - 2	2017	Fisc	cal Year	2017 - 2	2018
Project Name	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
Remote Access Solution								
Issue Smartphones to Patrol								
Organize and Discard Old Equipment								
Agenda Management Solution								
Reverse 911 System								
Single Sign-on for MDTs								
Evaluate MS Sharepoint								
Document Scanning								
Objective #3: Growth	Fisc	al Year	2016 - 2	2017	Fisc	cal Year	2017 - 2	2018
Project Name	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
Install Write Once, Read Many (WORM) Device								
Implement Bair Analytics								
Issue Body Cameras								
Research Geographic Information System (GIS)								
Two-Factor Authentication on MDT's								

Objective #3: Growth	Fiscal Year 2016 - 2017			Fiscal Year 2017 - 2018				
Project Name	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
Modernizing the Emergency Operations Center (EOC)								
Mobile Device Management (MDM) Solution								
Objective #4: Reliability			2016 - 2				2017 - 2	

Objective #4: Reliability	Fisc	cal Year	2016 - 2	2017	Fiscal Year 2017 - 2018			
Project Name	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
Server Replacement								
Network Security Audit								
Build a Disaster Recovery (DR) Site at PHPD								
Install Solarwinds								
Cloud Backup Service								

Objective #5: Cost Reduction	Fiscal Year 2016 - 2017			Fiscal Year 2017 - 2018				
Project Name	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
Renew Copier Lease								

Multiple Objectives	Fiscal Year 2016 - 2017			Fiscal Year 2017 - 2018			2018	
Project Name	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
Update Technology Plan								
Implement IT Work Order System								
Install Customer Relationship Management (CRM) Solution								
Research and Implement Human Resource Information System								
Evaluate MS Exchange 365								
Evaluate Replacement Financial System								

7 BUDGET

The following table illustrates the revenues allocated to the Information Technology Division for Police Department and all other information technology needs in Fiscal Years 2016 - 2018. The budget was created based on the City's information technology annual ongoing operational expenditures and estimates of the proposed 2016 - 2018 improvement projects.

Pudgot	Fiscal Year 2	016/2017	Fiscal Year 2017/2018	Totals	
Budget	Beginning Bal	Revenue	Revenue		
Police Department	\$349,110	\$560,000	\$565,000	\$1,474,110	
All Other	\$281,652	\$710,867	\$715,867	\$1,708,386	
Totals	\$630,762	\$1,270,867	\$1,280,867	\$3,182,496	

Below are the estimated expenditures required in Fiscal Years 2016-2018 to implement the technology projects identified in this Information Technology Plan.

Project Name	Approximate Cost
Objective #1: High Level of Support	
Accela Training	\$3,000
New Content Filter	\$30,000
Objective #2: Efficiency	
Remote Access Solution	\$50,000
Issue Smartphones to Patrol	\$40,000
Organize and Discard Old Equipment	\$0
Agenda Management Solution	\$66,000
Reverse 911 System	\$6,000
Single Sign-on for MDTs	\$3,000
Evaluate MS Sharepoint	\$0
Document Scanning	\$50,000
Objective #3: Growth	
Install Write Once, Read Many (WORM) Device	\$50,000

Implement Bair Analytics	\$30,000
Issue Body Cameras	\$80,000
Research Geographic Information System (GIS)	\$0
Two-Factor Authentication on MDTs	\$10,000
Modernizing the Emergency Operations Center (EOC)	\$85,000
Mobile Device Management (MDM) Solution	\$10,000
Objective #4: Reliability	
Server Replacement	\$160,000
Network Security Audit	\$20,000
Build a Disaster Recovery (DR) Site at PHPD	\$160,000
Install Solarwinds	\$80,000
Cloud Backup Service	\$10,000
New Computer-Aided Dispatch (CAD) System in 2021*	\$200,000
Objective #5: Cost Reduction	
New Copier Lease	\$120,000
Multiple Objectives	
Update Technology Plan	\$0
Implement IT Work Order System	\$5,000
Install Customer Relationship Management (CRM) Solution	\$50,000
Research and Implement Human Resource Information System	\$45,000
Evaluate MS Exchange 365	\$10,000
Evaluate Replacement Financial System	\$0
Total Estimated Project Expenditures For Fiscal Years 2016 - 2018	\$1,373,000

^{*} The current CAD/RMS system is expected to be replaced in FY 2020 - 2021 and the cost for replacement is estimated at \$450,000. The IT Division is distributing the expenditure across five years at a rate of \$100,000 per year to keep the cost manageable.

The table below summarizes the forecasted revenues and projected expenditures for Fiscal Years 2016 – 2018 based on the specific projects identified in this Information Technology Plan.

Police Department	Fiscal Years 2016 – 2018
Revenue	\$1,474,110
Expenditures	
Technology Projects	\$771,500
Salaries	\$140,000
Maintenance and Operational Costs	\$457,668
Total Expenditures	\$1,369,168
Ending Balance	\$104,942

All Other	Fiscal Years 2016 – 2018
Revenue	\$1,708,386
Expenditures	
Technology Projects	\$601,500
Salaries	\$771,733
Maintenance and Operational Costs	\$244,485
Total Expenditures	\$1,617,718
Ending Balance	\$90,668

8 FUTURE PROJECTS

The Information Technology Division will update this Information Technology Plan on a schedule that coincides with the City's Biennial Budget. The Division has already identified a number of projects requiring attention in Fiscal Years 2018 – 2020 and beyond. For example, the datacenters at both City Hall and the Police Department will need to be evaluated for redesign in order to maximize space utilization and minimize potential factors that would cause equipment failure. Minimally, new network firewalls will be needed by then to replace the existing ones which will be obsolete.

Ongoing efforts will also be made to digitize the City's document archives into Laserfiche and make them available for public access. This will alleviate much of staff's time devoted to satisfying public records requests.

In addition, the IT Division hopes to work with department and division leaders and their staff to identify areas where the injection of technology can increase staff efficiencies resulting in higher productivity, cost reduction, and/or added functionality.

Technology is ever changing, constantly improving to make processes and devices more efficient and less costly. The Information Technology Division is dedicated to seeking out those solutions that best adhere to our guiding principles while achieving our objectives to support City staff and better serve the City's residents.